CARMELIET, Peter Appl. No. 10/578,485

Attv. Ref.: 4465-10

Amendment

June 13, 2008

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A transgenic Xenopus tadpole comprising a transgene

that is <u>a reporter gene</u> specifically expressed in [[the]]<u>a functional</u> lymphatic vessel

system of said Xenopus tadpole and that visualizes said lymphatic vessel system.

Claim 2. (Canceled)

3. (Currently Amended) A method to produce a transgenic Xenopus tadpole

according to claim 1 comprising introducing a vector comprising a transgene under

control of a promoter specifically expressed in the lymphatic vascular system into cells

of a Xenopus tadpole.

4. (Currently Amended) A method according to claim 3 wherein said promoter is

selected from the list comprising a Podoplanin promoter, a Prox-1 promoter, a VEGFR-

3 promoter and <u>a LYVE-1</u> promoter.

5. (Currently Amended) A method for visualizing the lymphatic vessel system in

a Xenopus tadpole comprising generating a transgenic Xenopus tadpole comprising a

reporter gene that is specifically expressed in the lymphatic vessel system.

6. (Currently Amended) A method to identify a compound capable of modulating

lymphatic vessel development in a transgenic Xenopus tadpole according to claim 1

comprising the steps: Use of a transgenic Xenopus according to claim 1 to identify a

compound capable of modulating lymphatic vessel development comprising:

a) contacting said transgenic Xenopus tadpole with a test compound,

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b) comparing the lymphatic vessel system in said transgenic Xenopus <u>tadpole</u> contacted with said test compound with the lymphatic vessel system of a transgenic Xenopus <u>tadpole</u> that was not contacted with said test compound and,

c) determining the effect of said test compound on lymphatic vessel development, such that if lymphatic vessel development in the transgenic Xenopus contacted with said test compound is different from the lymphatic vessel development in the transgenic Xenopus <u>tadpole</u> that was not contacted with said test compound, said compound is a modulator of the lymphatic vessel system.